



NASHVILLE/How Much Hype?



DISH IT OUT/How Many Homes?



HBO & M/A-COM / Pop The Cork?

THE TWICE PER MONTH BUSINESS JOURNAL OF TVRO

## COOP'S SATELLITE DIGEST



SEPTEMBER 15, 1984

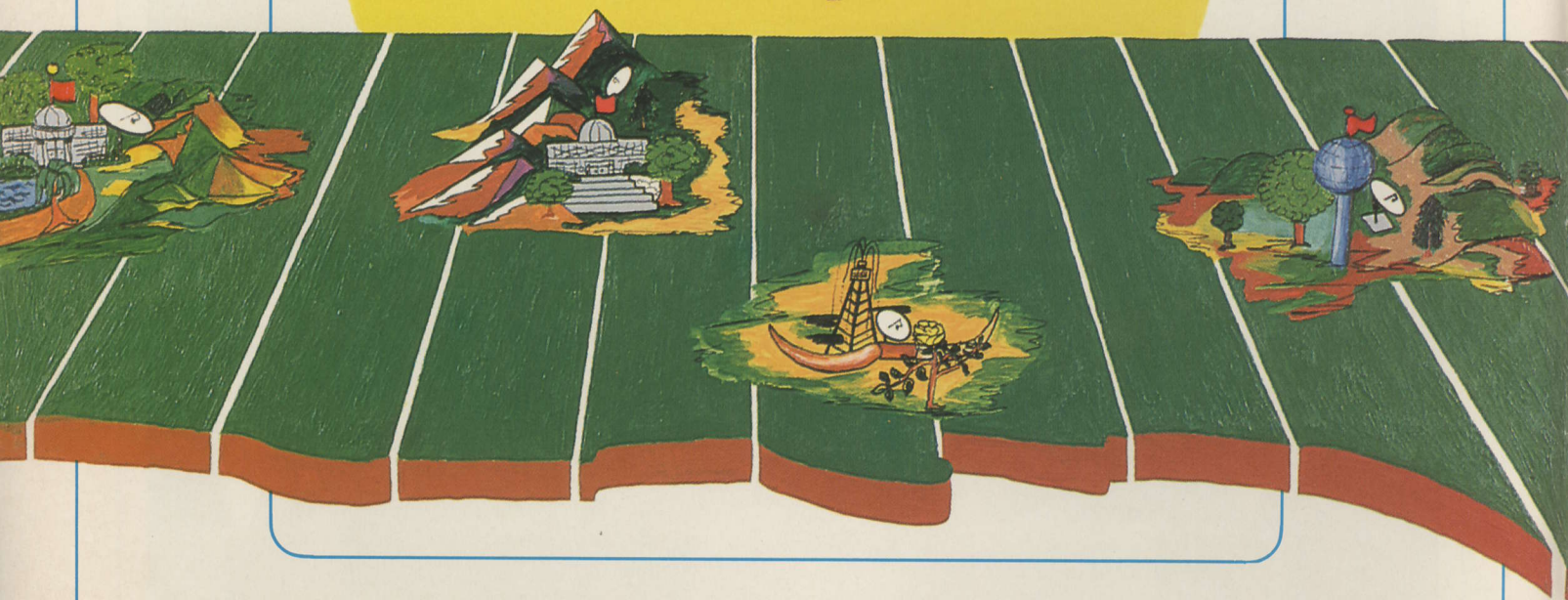
**uniden**  
CORPORATION OF AMERICA  
15161 Triton Lane, Huntington Beach, CA 92649  
Telephone: (714) 898-0558 Telex: 069-2354



# Nationwide . . . Echosphere has The Echo Beta 9 Antenna

- 9-foot diameter
- 8 panel construction
- Baked epoxy finish

- 39 dB gain
- .3 f/d ratio
- Packed in two easy-to-ship cartons



Largest Product selection in the industry,  
Now with four locations to serve you better.



5671 WAREHOUSE WAY  
SACRAMENTO, CA 95826  
(916) 381-5084  
To order call:  
**800-338-5477** (WESTERN ZONE)  
**800-338-5478** (IN-STATE CA)



1925 W. DARTMOUTH AVE.  
ENGLEWOOD, CO 80110  
(303) 761-4782  
To order call:  
**800-521-9282** (CENTRAL ZONE & CANADA)  
**800-521-9282** (IN-STATE CO)



3901 LA REUNION PARKWAY, BLDG. 15  
DALLAS, TX 75212  
(214) 630-8625  
To order call:  
**800-521-9282** (S.W. ZONE)  
**800-521-9282** (IN-STATE TX)



10536 LEXINGTON DR.  
KNOXVILLE, TN 37922  
(615) 966-4114  
To order call:  
**800-223-1507** (EASTERN ZONE)  
**800-421-9935** (IN STATE TN)



SEPTEMBER 15, 1984

**IMPORTANT Changes Coming**

In the hype and hoopla that permeated Nashville's just completed joint STTI/SPACE 'show' you may have missed some of the lesser announcements. A couple could have a considerable bearing on what you do, and how you do it, in the months and years ahead.

**For example**, did you catch that there is a dramatic change coming, in the sky, on F3R and its nearby neighbor Galaxy 1, just a few weeks from now? We reported some months ago that HBO was planning to 'shut down' their eastern feeds for Cinemax (TR23) and HBO primary (TR24) around the 1st of October, on F3R. Not much has been said about that in the interim, although October 1st is virtually on top of us.

In another 'for example,' Showtime east coast (TR12) and The Movie Channel east coast (TR5) are ALSO moving off of F3R to Galaxy 1. There is one more also scheduled for approximately 1 October; Ted Turner's **WTBS** will be moving to transponder 18 from TR6 on F3R.

This of course creates quite a line-up over on Galaxy; a line-up of programming services which actually puts F3R inhabitants at something of a disadvantage. The only 'independent' broadcast service remaining on F3R is WGN (TR3). The only movie services left on F3R are west coast feeds for Showtime, HBO, Cinemax and the short-day service from HTN.

**That leaves** MTV and ESPN as about the only two 'mass-appeal' cable services found exclusively on F3R, and ESPN owns transponder rights on Galaxy 1 and should be moving as well.

There was the belief back in 1978 and 1979 that if HBO moved 'birds' that any other services that wanted to stay 'viable' were going to have to move as well. There was a period in 1978 and 1979 where HBO was heavily rumored to be leaving the safety of an RCA bird. Enough people believed that story to cause a run on Westar 'futures'; i.e. programmers

were snapping up 'options' for Westar, 'just in case' the HBO rumor proved to be true. The rumor was true, alright, but RCA finally made HBO an offer they could not refuse and HBO stayed put. For awhile.

Now, **how does all of this affect you**, the seller of home-style TVRO dish antenna systems? First let's consider the programming options:

- 1) Movies or services which rely heavily upon recently released movies are a demonstrated important part of TVRO-appeal. As of October 1st, we'll have 4 such services on F3R (of which HTN is part of day) while on Galaxy 1 we'll have 7 such services (plus Galavision which is a Spanish language premium service).
- 2) Super stations are a second category which attract heavy viewer interest. As of October 1st we'll have 1 such service on F3R and 2 such services on Galaxy 1.
- 3) News and news-related services attract plenty of viewers. There will be 3 on each bird (the same 3).
- 4) Sports attracts plenty of semi-commercial terminal buyers (bars and clubs). We'll have one on F3R and one and a half (the half being part time use) on Galaxy 1.

Anyway you slice it, Galaxy is a formidable opponent to F3R. But there is more.

Still remaining on Galaxy are at least 4 transponders not yet dedicated to a specific programming format. Of course the same thing could be said (where the number would also be four) back on F3R. Of those four on Galaxy, HBO owns or controls three.

All of this deals only with the programming versus programming aspect of each of the two birds. As any TVRO dealer knows, there is more to the comparison than mere programming. There is the 'signal strength' issue.

**Galaxy is stronger** virtually everywhere than

**MID-MONTH COMMENTS/ continues page 22**

**COOP'S  
SATELLITE  
DIGEST  
/2**



**CSD/2** — Coop's Satellite Digest published twice per month by West Indies Video, Ltd., a Turks and Caicos Corporation with corporate offices located at Grace Bay, Providenciales, Turks & Caicos Islands, BWI. Sales and subscription offices maintained at Fort Lauderdale, FL. (P.O. Box 100858, Ft. Lauderdale, FL. 33310; 305/771-0505 between 9 AM and 4 PM eastern, weekdays). CSD/2 is issued on the 15th of each month as the mid-month companion to CSD which has been issued on the 1st of each month since this industry began; October 1979. **CSD/2 is combined with CSD** for all domestic (U.S.) subscriptions and is also available optionally for CSD readers outside the U.S. Additionally, CSD provides CSD/2 to all **Dealer Members of SPACE**, without cost to those dealers nor to SPACE, upon request. Subscription rates are \$75 per year within U.S. (where U.S. zip codes apply), \$85 in U.S. funds in Canada and Mexico and \$100 (in U.S. funds) elsewhere. All copies of both issues are sent **AIRmail to all subscribers**, worldwide. West Indies Video is a 'Pioneer/Dealer' class member of SPACE, the international organization of TVRO dealers, distributors and manufacturers. CSD/2 is Copyrighted 1984 © by West Indies Video, Ltd.; Robert B., Susan T., Tasha A. and Kevin P. Cooper.



## NASHVILLE HUMMMMS

### FEELING Good Again . . .

There was a remarkable transformation of virtually an entire industry over the Labor Day weekend **STTI/SPACE** industry convention; people who have not 'talked' (civily, anyhow!) with one another were doing so once again. People who have refused to 'share the same' podium, or stage, or banquet table suddenly found themselves doing just that; **and liking it**. Nashville may not have cured all of the industry's injured but it did cleanse many of the wounds.

How did Nashville rate as a 'show'? **Sally DiDonato** of NSC: "I rate this show as the best to date; Las Vegas this past spring would be number two and the 1983 Nashville show would be number 3. It was an excellent show!" Sally's assessment was echoed by virtually everyone on hand from small regional distributor exhibitors to the largest OEMs.

**Randall Odom** of Odom Antennas: "We have been running our two fiberglass antenna plants at perhaps 60% capacity through the summer. The minute we get home, we will shift into high gear. It will take us well over a month to catch up with the rush of orders from the show. It looks like a great fall."

Official 'numbers,' the usual barometer of a show, were not totally tallied as **CSD/2** went to press. However, they will be close to the following:

- 1) Number of paid attendees (including exhibitor personnel) — **9,500(+)**;
- 2) Number of exhibit booth spaces — **504**



**ONE FOR TVRO'S SIDE/ HBO's Kinderman (right) takes it on the chin from floor question and Delta's Sandy Wirth keeps track of the 'score' as Kinderman wades through hostile waters in Nashville.**



**OUT OF THIS CHAOS . . . would come a spic and span exhibit hall isle jammed with more than 9,500 attendees less than 24 hours from the time this photo was taken.**

- 3) Number of antennas in antenna lot — **330** give or take a dozen or so (the antenna lot was never stable; antennas 'came' and 'went' throughout the show).

**HBO**. They were there. They attended at two levels; Marketing head **Ken Kinderman** participated in a panel discussion chaired by Channel Master's **Don Berg** and including **Taylor Howard** and **Sandy Wirth** (Delta Distributing). Some surprises here but the surprise was 'on' Kinderman, not the attendees. HBO had contacted **SPACE/STTI** to ask their 'cooperation' in creating a 'forum' for HBO's Kinderman. With an anticipated 'Month-of-October' roll out for CBD service, HBO wanted to attain some visibility before TVRO people without having to 'give away' any 'secrets.' The special panel was created solely for that purpose. The participants were carefully hand selected to 'reward' those who had been supportive of a 'sensible solution' to the 'scrambling problem' within **SPACE**. Kinderman was assured there would not be any embarrassing dialogue from the panelists. There was none. But somebody forgot to 'cue' the audience. The last 20 minutes of the session brought intensive questioning from the floor as system dealers, distributors and OEMs questioned Kinderman closely about HBO's decision to work 'first and foremost' through their existing cable affiliates. Kinderman walked away licking a few wounds and it should have been apparent to him that HBO's entry into the home TVRO world was not going to be a 'Tennessee Cake Walk.'

A dealer from Ocala, Florida summed up the impression many carried away:

**"They (HBO) have alot of problems and I don't think they will have them all sorted out even one year from now. And honestly, I don't think they have a 'marketing plan' for CBD yet."**

A far less visible contingent from HBO toured the exhibit hall floor





## **SATELLITE TELEVISION SYSTEMS**

**CALL TOLL-FREE**

• INSIDE INDIANA CALL...

**800-321-7291**

• OUTSIDE INDIANA CALL...

**800-457-3330**



**COMPLETE SYSTEMS, ANTENNAS,  
RECEIVERS, LNA'S & ACCESSORIES**

*"Nation's Largest Satellite Equipment Distributor"*  
P.O. BOX 3300 • TERRE HAUTE, INDIANA 47803

**hoosier  
electronics**





**THE RAINS CAME/** and the trees bent, antennas tipped and people scattered for the inside dryness. A vicious early-fall cold front tore through Nashville just minutes before the show opened on Monday morning but surprisingly little real damage was done. By noon most had been repaired and the antennas were back in operation.



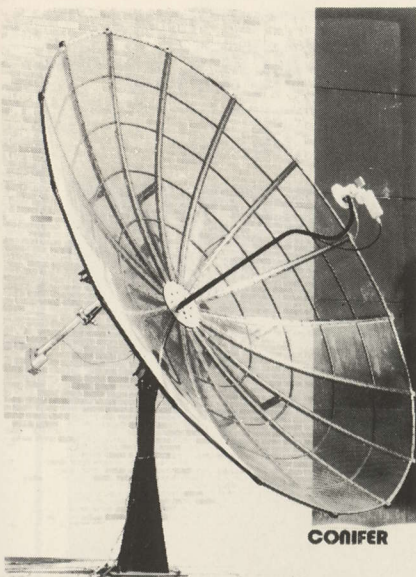
**ONE OF FOUR/** heavy bundles of cables, inter-connecting the 330 outdoor antennas to the 504 booths wanders into the building from the parking lot. The sudden rainstorm on Monday morning caused quite a few exhibitors to wish they had not 'spliced' their lines on the way inside!

and talked quietly with receiver suppliers. At best there was confusion here because of 'multiple signals' from M/A-COM and HBO. Here is what that was all about.



**DON BERG**, Channel Master's representative on the 'full' SPACE Board, makes a point (left) while Janeil's Bob Dushane makes a note.





# **Satellite Video Services**

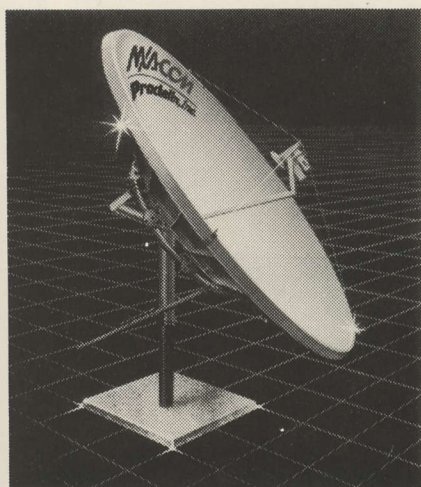
**The Master Stocking Distributor  
with the services you require,  
and the products you demand.**




---

**Full Service Distributor**  
**Free Monthly Dealer Training Seminars**  
**Free Weekly Technical Seminars**  
**Competitive Pricing**  
**Complete Technical Assistance**  
**Prompt Shipment and Delivery**  
**Factory Authorized Service**  
**High Demand Product Line**  
**Three Stocking Locations**

---



- M/A Com
- Prodelin
- Omni Spectra
- Uniden
- Wilson
- Luxor
- Intersat
- Conifer
- Draco Aimers
- Winegard

---

***Call for free Catalog & Price List***

*Dealer Inquiries Only*

---

## **The Northeast's Leading Distributor**

**RR #1, Box 85-S, Catskill, NY 12414 (518) 678-9581**  
**RFD #2, Harriman Hill Rd., Raymond, NH 03077 (603) 895-3182**  
**317 E. Pleasant Valley Blvd., Altoona, PA 16602 (814) 942-5003**  
**(800) 242-3860 PA only**





**ANTENNAS ONE/** An overall view of every antenna in the lot was difficult. At an average retail value of \$900 each just imagine \$300,000 piled up on the concrete and you have a start on the problem.

- 1) HBO signed their formal agreement with M/A-COM LinkAbit in mid-August. That's the agreement which binds HBO to LinkAbit technology for encryption. This agreement calls for **VideoCipher 2** technology to be used perhaps through late 1986/early 1987. VideoCipher 2 is the **simplified** version of the original VideoCipher 1 technology which M/A-COM began showing off in 1983. Engineers describe VideoCipher 2 as 'comparable in technology and security to Oak Orion.' The video CAN be decrypted without an elaborate system. The audio, however, like Orion, is severely encrypted (digital and encrypted). The more complex VideoCipher 1 technology, the kind we have 'seen' to date at shows, will NOT be available until the decryption system can be reduced to a VLSI chip format. And that's where the 1986/87 time-frame comes from.
- 2) 'Somebody,' meanwhile, has been telling distributors (who have been telling dealers) that 'unless you handle/carry/sell' the M/A-COM receivers (T1, H1), 'you will NOT be able to offer the HBO service.' That's where the 'confusion' comes from; **is this true?**

In a press release dated August 31st, M/A-COM revealed that effective October 1st **they would release** a 'preliminary set of requirements for interfacing their M/A-COM LinkAbit VideoCipher II<sup>TM</sup> descrambler units with **existing** C-band home TVRO satellite receivers.' Now, what is that all about?

M/A-COM apparently wants to assist TVRO receiver manufacturers in determining just what circuit design changes are required, in the TVRO receiver itself, to make it possible for the receiver to properly 'feed' a VideoCipher II add-on descrambler unit. **CSD** revealed the

majority of this data in our **August 1st issue**, including technical interfacing parameters with a block diagram. There have been some changes in the interim; HBO has apparently told M/A-COM's LinkAbit



**NOT BAD!/** **SPACE's** Rick Brown rises from audience at TVRO's Birthday Party in response to being called from the stage to step forth and accept an industry "Pioneer's Pioneer Award"; Robyn Nietert on right.





**ANTENNAS TWO/** Nose to nose, belly to belly . . . when the wind blew they shook like giant bowls of jelly. Believe it or not, you **COULD** still walk between antennas over most of the lot even if you did have to turn sideways to get through in some spots!

people to 'loosen up' the LinkAbit specs so that more TVRO receivers can actually work with LinkAbit. The logic here is that if the LinkAbit specs are 'too tight,' they (HBO) will lose a major segment of the

marketplace by not being able to deliver service to receivers that cannot be made to interface with LinkAbit. This is NOT in HBO's best interest.

And that was the 'message' being circulated to TVRO receiver manufacturers by the 'second' HBO contingent that was 'working the convention floor.' The M/A-COM project will function as follows:

- 1) Receiver manufacturers should contact M/A-COM (Attn: **Mr. James F. Bunker**, M/A-COM, Inc., 7 New England Executive Park, Burlington, Ma. 01803; 617/272-9600) to request the preliminary 'data';
- 2) M/A-COM will assist receiver manufacturers in evaluating both the VideoCipher II specifications, **and**, they will ALSO help the receiver manufacturer analyze his own receiver design.
- 3) M/A-COM will ALSO give the receiver manufacturer **suggestions** on how the receiver circuit could be modified to make it VideoCipher II compatible.

All of this will be on-going 'during the fall' and then a 'final set of receiver/descrambler interface requirements' for the industry will be available (it is planned) **this December**.

The bottom line? HBO was there. M/A-COM is now showing a willingness to help (competitive) receiver manufacturers design their receiver video circuits to insure widespread compatibility with VideoCipher II. When will hard scrambling start for real? **Nobody** yet knows.

Outside of the STTI/SPACE convention, there were other parallel developments which most of those attending the show were **not** aware of:

- 1) F3R, according to cable programmer plans, will slowly turn into



**AND THE AWARD/** Delta's Sandy Wirth presents Industry Award to Rick Brown who accepted by saying 'This award is not my alone, it recognizes the on-going contributions of many.' CSD's Carol Graba to left.





**ME?/ South Carolina 'Pioneer'** Robert Coleman responds to being asked to come to the stage to accept his award. Lib Coleman on left. The award was presented by David McClaskey of Intersat Corporation.

a 'second rate program source.' Galaxy I will, within a year, be the 'primary cable bird.' However, not all of the primary programmers can be handled on G1, nor can all of the 'second level programmers' be handled on F3R (witness the number on F4). There is a move underway to make **Comstar D4**, which presently has some cable AND SMATV programming (i.e. ON-TV), a second 'second level' cable bird.

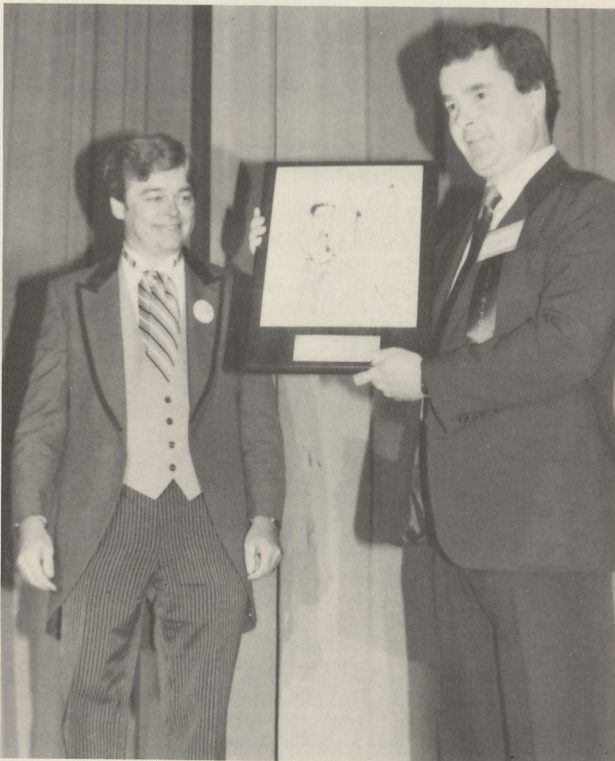
- 2) HBO is close to a 'deal' with RCA to purchase virtually all of the transponder space on RCA's '**KU-1**' bird; the first of the RCA 12 GHz birds. HBO has a well-set game plan for DBS and it



**PROFESSOR TAYLOR HOWARD on stage with his "Pioneer's Pioneer Award"; Taylor was recognized for his consistent efforts to keep the industry moving ahead. Award presented by Dick Deutsch of Channel Master Corp.**

involves serving **rural America** using **Galaxy** and serving **urban America** on '**KU-1**.' The 'CBD' roll-out for HBO on Galaxy is almost an 'interim plan' to get HBO into the (CBD) DBS business, pending launch in two to three years of the RCA 'KU-1' bird.

- 3) The 4 GHz plans revolve around how the FCC treats the new petition to keep 3 degree spacing 'alive' **between F3R and G1**. HBO is convinced that if the present 3 degree spacing can be retained, with the present cross-pole format of F3R and G1, the smaller 4-6 foot dishes will be a viable marketplace. They have



**ROBERT TAGGART/ recognized for his early-'70's work in creating the 'petal-bolic' antenna design. One benefactor of that early work, David Johnson of Paradigm (left), made the award presentation.**



**SAYS IT ALL/ from the second story of the two-story Intersat booth, a large American flag waves in the indoor breeze as Uniden's Guy Davis walks below.**





**DID I SAY THAT?/** Single conversion receiver Pioneer David Barker (left) watches big-screen videotape of his early work roll just prior to being announced as winner. Award was presented by Jacob Inbar of California Amplifier.

support in this plan, of course; cable engineers have decided that the 3 degree spacing makes multi-beam antennas practical for picking off signals from G1/F3R and D4. They are **NOT convinced** the same three-bird-cable-set would play if the birds were but 2 degrees apart.

#### MEANWHILE On The Floor . . .

The floor of the show was driven by (1) pricing, and, (2) pricing! There was a shortage of innovative new products (some will dispute this!). However, there were no real pricing surprises either.

**120 degree LNAs**, the 'pricing barometer' for the '84 industry, dropped just a few dollars; heavily promoted floor specials found them in the \$95 region. Delivery was 'instant.'

Off-shore produced receivers were everywhere. Many were single conversion 'basic designs' with downconverters in the \$250 to \$350 (dealer cost) region. Many others were knock-offs of the original Anderson BDC receiver with pricing down to below \$200 with the downconverter.

#### Innovative:

- 1) **MTI** announced a new receiver product with a true non-volatile memory. That means the 'memorized' functions of the receiver (16K of E<sup>2</sup> PROM) will 'hold' even when power quits for long



**COST EFFECTIVE RECEIVERS/** BR Satellite's Mike Stevens (left) presents "Pioneer's Pioneer Award" to Sat-Tec's John Ramsey. Ramsey's firm was the first to break \$1,000 receiver 'price barrier'; way back in May of 1980!



**SURPRISED/** Canada's David Brough (right) accepts his award from Uniden's Guy Davis. Brough pioneered the 'TVRO attitude' by pushing Canadian government authorities to relax regulations which made TVROs illegal in Canada.



**FULL HOUSE/** the Industry's 5th Birthday Party played to a nearly full house (1,050 seats) and they all sang 'Happy Birthday TVRO' as the program closed. Coming October 18th to a 'satellite near you'!



**FOR ARTHUR C. CLARKE** Antenna and feed pioneer Bob Luly (right) accepted the Clarke award from USS/Maspro's Doug Dehnert. We were all very sorry Arthur could not be on hand but videotape of his work delighted the audience.





**INTRODUCING** the award presenters, Susan Cooper (left) and Mary Maniaci kept the program moving at a brisk pace. The 'timed-for-television' event went very smoothly after only a short afternoon non-dress rehearsal.



**INTRODUCING HER HUSBAND/** Polly Dehnert (right) is assisted by CSD's Carol Graba. Polly and Doug entered the industry in the winter of 1980 and she recalled that they had 'paid their dues.'



**HALF-WAY POINT/** Dr. Ed Meek (*Satellite TV Opportunities Magazine*), Lloyd Covens (*Channel Guide*), Tasha Cooper and Carol Graba. Covens and Meek explained the awards program and outlined how the 1985 awards will be operated; a joint effort of industry publications.

periods of time. It uses a technology called 'capacitance plate overlay' which lays down a capacitor storage system on the chip itself. Capacitors are capable of holding their electrical energy for indefinite periods of time if properly structured. The MTI receiver gets our 'award' for being the most innovative totally new technology (adapted to TVRO) at the show.

- 2) **Anderson Scientific** introduced their ST2000 receiver; the latest version of their BDC system. The earlier versions have had objectionable audio reproduction on **some** of the narrower audio sub-carriers; the ST2000 solves this problem rather elegantly. The demonstration we saw in Nashville also suggested their video performance is improved as well.
- 3) **DishSet** is an interesting new product that allows you to anchor a polar mount pipe in the ground 30 minutes after you begin the hole-pour. This is a non-concrete product (two part liquid, shipped in two separate containers) that mixes in a bucket for 10 to 20 seconds and then pours in the hole. Thirty minutes later you have a foundation for the polar mount that you can work on. An average 36 to 48 inch deep hole will cost you about \$40 to fill. If 30 minutes time, no mess, and \$40 per install interests you, they are at P.O. Box 2105, Durango, Colorado

NASHVILLE/ continues page 15

## SPACE DEALER BOARD DIGS IN!

### A NEW Start . .

SPACE's new 'Dealer Board' met multiple times during the Nashville show and adopted a series of tough work assignments designed to put **dealer control of dealer problems** on the map in the shortest possible period of time. The new 21 person Board (both women and men) is planning to present the full SPACE board with a total working plan for the coming year during the forthcoming November Board meeting just ahead of the STTI Dallas show.

The dealer group elected its own sub-group, 8 people who will represent the Dealers on the full SPACE board. Basically, all of those dealers who were qualified-nominees during the recent SPACE nomination process ended up on the new Dealer Board. An additional number will be appointed to the Dealer Board to 'fill-in' geographic



holes in the random nomination process. When it is completed, shortly, the full Dealer Board will hopefully have representation from all parts of the United States, one or two from Canada and perhaps a single representative from outside of the United States (Caribbean/Central and South America).

The dealers grappled with a long list of problem areas, promising themselves and the industry they represent that they would seek to find 'common-sense-solutions' to the problems faced by dealers. Not necessarily in order of priority, nor in sequence of study, were the following areas:

**1) Definition: Just what is a dealer?**

Several said that they felt a dealer was anyone with a showroom who engaged **solely** in retail sales, who did not act as a 'small distributor' and who did not engage in the purchase of equipment for



**THIS DEALER** tells it like he sees it: dealers were more open about their likes and dis-likes and numerous either spoke up or 'said' in other ways where their allegiance was.

re-sale to other dealers on a routine (and advertised) basis. This problem will be a tough one since many dealers **do group together** to purchase antennas and other products to get '**cooperative buying power**.' Is such an action, buying together, an action that would 'disqualify' a dealer from the accepted definition of dealership(s)? That remains to be sorted out. If cooperative buying is deemed an acceptable (cost effective and money saving) practice, where should the line be drawn to separate 'small distributor operation' from 'large dealer operation'?

Several of those present also made the point that while the dealers may be trying to define the role of a dealer, they were not so sure that the distributors and OEMs were going to be as quick, or even responsive, to defining their own roles in the industry. One dealer suggested



**ANNA VISALLI** (left) and **Mary Lou Heinz** (Indiana) are two lady dealers on the **SPACE Dealer Board**. Both bring several years of dealer experience to the Board and a view of consumer needs which will be instrumental in guiding the new Dealer Board through its first year.

that if dealers 'clean up our acts and we become strictly retail, showroom operators, how do we cut down on the incidence of distributors who also operate retail outlets or OEMs who sell retail to anyone who walks in the door?'

At the root of this dialogue was the fear that if dealers become too narrowly defined, they will find themselves at a competitive disadvantage from the other levels (distributors, OEMs) who fail to properly define and police their own activities.

"You can never eliminate such competition" noted one Dealer Board member, "you simply have to compete with them by doing a better job for the consumer so the consumer realizes the benefits of dealing with a **REAL dealer** . . .".

**2) Membership drive: How to get more dealers into SPACE so the Dealer Board has greater internal 'power' within SPACE?**

Chuck Hewitt reported that perhaps 400 new dealers had signed up in Nashville. The number was meaningless until Hewitt also pointed out that he hoped that before the Dallas show later in November, the **total number** of **SPACE** dealer members would top 1,000. The **SPACE** dealer membership roster, thought to contain as many as 750 dealers earlier this summer, has now been 'purged.' Apparently a significant number of people and firms appearing on that roster were



**DEALER JOHN M. SALLE** (The Earth Station, Naples, Florida), wife **Carol** and **Coop** at party. Salle and Carol won a July 1984 CSD contest and will be coming to Provo as guests of CSD this winter.



not current in their dues (many had not paid renewal dues for two years or more) and when the list was properly re-organized the number was closer to 400 than 500. SPACE, of course, lowered dealer dues to \$95 per year early in August and that price reduction has had a significant impact on the recruiting activities. The new Dealer Board pledged to create better direct-contact programs to expand the membership at the dealer level in the next 90 days.

**3) Support for legislation: The dealers wanted to 'carry the ball' to alert other dealers plus the consumers of the importance of the pending legislation before the Senate and the House.**

The dealers plainly felt that it would be far better for the dealer group to advertise, promote and 'talk up' the importance of the 'Satellite TV Viewing Rights Act(s)' legislation than to depend upon OEMs and distributors to do this. The obvious fact that dealers are in DIRECT contact with consumers while distributors and OEMs are in (hopefully!) INDIRECT contact with consumers was noted several times.

**4) Dealer education and certification: The new SPACE dealer certification program got mixed reviews. Everyone agreed on the importance of having a trained, certified cadre of dealers operating in the field. Not everyone agreed that the present SPACE dealer training program was going to do the job.**

SPACE's Hewitt defended the program as 'evolutionary' and pointed out that the first two seminars, conducted in Nashville, were 'proto-types' which he said would be fine tuned at future events. **Bob Luly** and **Brent Gale** taught the first two sessions and two or three more will be offered in Dallas.

The dealers on the board felt that the courses were not properly framed. One said "The courses (which he attended) were too far above the total novice dealer for the new dealer to grasp the information; and, they were too far down the scale for the experienced dealer to get anything from them." The bottom line may turn out to be two totally separate certification programs; one for the complete novice and another for the more advanced (graduate) dealers. Several com-

mented that if it took 15 minutes of course time to **try** to explain 'antenna declination' and then after going back over it several times, there was a 'hard core of 25 or so in the audience who still did not grasp the explanation, how does that sort of diversion help the experienced dealer who is there to LEARN?'

The new dealer board will be taking an active part in the creation of the certification program and in the future course-instructors will probably have to spend more time preparing their programs and giving the program a dry run to at least some representatives of the Dealer Board **before** the courses are presented to the dealers themselves openly in session.

Chuck Hewitt pointed out one important point missed by many. The Dealer Certification program can **NOT** certify that a dealer is competent; only that a dealer has **attended** the course and has attained a 'passing grade in the test sequence.' Many were under the misconception that the certificate would carry more 'weight' than that. Hewitt explained that SPACE felt there were 'liability' problems associated with actually '**certifying a dealer for competence**' on the basis of limited courses and course-testing. He promised to study the matter further and report back to the Dealer Board.

**5) Consumer financing: How much information was available, and how could that information best be distributed to the dealers, on obtaining local, consumer financing?**

It was apparent, from discussion, that there are many very successful programs in force where the local dealer can use his **local bank** for 'third party' financing; dealers said they had the ability to complete dealer-initiated credit application forms and to take those forms directly to their local banks for credit approval (or rejection). The consensus was that the Dealer Board would create a packet of information, explaining how those dealers who had made such programs work had been able to work out the details, for other member dealers. **Charlie Brown** suggested that the packet also include detailed step by step guidance to the dealer explaining to him or her how credit works, what information the bank is looking for, and basically, guiding the dealer through the establishment of a credit relationship



**DEALER BOARD MEMBERS** on hand for the September 5th session included: (left to right, back row) **Charlie Brown (Ill.)**, **Jeff Manion (Kansas)**, **Scott Poole (North Carolina)**, **Hoyt Foster (Texas)**, **Tom Spessard (California)**, **Wayne Morong (Maine)**, **Keith Anderson (Arizona)** and **King Oberlin (Indiana)**. In the front row, **Anna Visalli (New Jersey)**, **Mary Lou Heinz (Indiana)**, **Ed Reynolds (North Carolina)** and **Tom Harrington (Ohio)**.



with the bank.

The Dealer Board felt it was more appropriate for **that group**, rather than the full SPACE Board, to deal with the thorny problems associated with getting industry-wide data and guidance out to dealers on the subject of finance.

The **SPACE Dealer Board** will next meet as a group Friday the **16th of November**, just ahead of the STTI Dallas show. Between now and then several committees, formed to deal with the major issues noted here, will be meeting and rounding up the data they need to

present a complete set of reports to the full Dealer Board. Then the eight member group, representing the Dealer Board on the full SPACE Board, will attend the full Board meeting on the 17th of November.

The Dealer Board was active, concerned, and as one attendee put it, "This is a historic event because for the first time the dealers in this industry are talking and meeting together to try to shape our own destiny. We may not find all of the answers but we have all of the questions and a full year's worth of work ahead of us!"

#### NASHVILLE/ continues from page 12

81301; 303/385-4814.

- 4) **Northwest Satlabs** had their COSMOS II "automatic" receiver on hand. That was not 'new'; they also displayed it in Las Vegas. However, the way they displayed it was 'innovative.' First they took four of the most popular receivers and built a display around them. They added a fifth receiver; their own. Then the user could select any receiver on any transponder he wished. The monitor switched back and forth as you changed receivers. From this test you had to come to the conclusion that the COSMOS II may be the most underrated and least well known top performing receiver in the industry today. **Our suggestion** is that if you are interested in selling a very high performance product that is priced down there where most dealers like, you should talk with the folks at Northwest Satlabs (503/754-1136).
- 5) **Chaparral** will be shipping a new model called **Polarotor® III** in November. They have reduced the size, the weight and the complexity of the ever-popular Polarotor by creating a new probe design. Interfaced to the Polarotor I control box, it gives 90 degree flops in under a half second with complete control over the skew.
- 6) **AVCOM** expanded their passive line by adding a 'fully isolated power divider' (model IPD-65). This combines ferrite isolation and automatic feedline power switching (DC block circuits are included internally) so you can operate two receivers (or more with combinations) from the same receiver antenna system without fear of cross-talk and inter-action.
- 7) **Gillaspie Communications, Inc.** is now calling itself GCI, perhaps to dress up the image-problems that came during



**BOMAN's BOB MANIACI/ (right) and Coop paced the party event by filling the 'Masters Of Ceremony' role with the help of Mary Maniaci and Susan Cooper. There was only modest 'straying from the script.'**

some problems at the company earlier this year. They were describing a new line-up of receivers and accessories including the GCI 8300 receiver, the GCI 8200 antenna control system (indoor controller, outdoor drive and GCI 'Polarizer'



**VIEW FROM THE AUDIENCE** With large screen projection screen in center where pioneer videotape rolled ahead of each award, and Pioneer caricature drawing behind each 'winner,' left to right: Coop, Bob Maniaci, Robert Coleman, Robert Taggart, Richard L. Brown, Taylor Howard, David Barker, David Brough, John Ramsey and Bob Luly (for Arthur C. Clarke).





**NAPOLEON WAS BANNED** to an island/ Paradipso's David Johnson was 'banned to Redding.' That's a half-pound-chunk of Gouda cheese in-place of his mouth; significance unknown. (Yes, he **was** sober when this picture was taken!!!).

and GCI LNA) and the GCI 8400 stereo processor. They claim their Polarizer has a patent-pending 'signal-enhancing polar probe,' whatever that may turn out to be.

- 8) **Wavetek Indiana**, an old-line-name in broadcast, cable and microwave test equipment, introduced a new TVRO receiver test set system. It was very high quality (as Wavetek gear tends to be) and it allows you to completely check out a 70 MHz IF receiver (video and audio), do receiver alignment, and troubleshoot problems in a hurry. To check out the 4 GHz portion, you need to add other (optional and extra) Wavetek gear. The 70 MHz portion is well thought out and useful; the 4 GHz portion is expensive and needs some additional cost cutting attention. cutting attention.

#### PARTY Time . . .

The TVRO Industry **Fifth Birthday Party** was a special event that highlighted the first full day of the show. The 70 minute 'program' brought the industry's attention to the special work and efforts put forth by eight early pioneers who created certain advances in our technology or legal foundation. It has been this 'foundation' which the industry has grown from in the succeeding years.

The timed-for-television event will be presented virtually intact on **October 18th** in a special two-hour telecast sponsored by **CSD** and **CSD/2**. The actual transponder for the 8 PM (eastern) two-hour event will be announced in **Channel Guide** publication just in advance of the program itself, as well as in **CSD/2** for October 15th.

The first award went to **Robert Coleman** of Travelers Rest, South

Carolina. Robert's early contributions to TVRO included LNA breakthroughs as well as the first operating LNC packaging. Coleman's **SPACEVISION** firm displayed a very nice new receiver in Nashville as well.

The second award went to **Robert Taggart** of Chaparral Communications. Taggart was recognized for his work in petal-bolic antenna design; work done while he was at Stanford University in the early 70's. Subsequently he has become an on-going contributor to our technology and advances with the **Chaparral** line of feeds.

Award number three went to **Richard L. (Rick) Brown**, legal counsel for **SPACE**. Brown single-handedly masterminded the defeat of a piece of legislation before Congress in the summer and fall of 1980; had that legislation been passed by Congress at the time, TVRO growth would have stopped totally dead in a matter of weeks.

Number four award went to **Taylor Howard**. Taylor's early receiver work made the first production line receivers possible and he has served the industry consistently with his many antenna, feed and **SPACE** contributions.

The fifth award went to **David Barker**. He pioneered single conversion 'image rejection' receiver design and it was his innovation that launched **KLM** into the receiver business in the late summer of 1980. The single conversion approach to receivers brought dozens of other receiver firms into the business and David started it all.

Award number six went to **David Brough** of Ontario, Canada. Brough agitated the Canadian authorities so that ultimately they would adopt a 'hands-off' policy on TVRO service in Canada. Prior to his efforts, there were heavy restrictions on use of TVROs. The Canadian 'example,' forced by Brough, ultimately would influence the 1979 US decision to deregulate TVROs (i.e. end TVRO licensing).

The seventh award went to Sat-Tec's **John Ramsey**. John has been the price-conscience of the industry for nearly five years, constantly pressuring people to lower receiver and system pricing. His firm was the first to drop below \$1,000 for receivers and he has led the constant downward spiral since that time.

Award number eight of course went to **Arthur C. Clarke**, the visionary who created the satellite system we know today. Dr. Clarke was not in Nashville and another industry pioneer-engineering leader, **Bob Luly**, accepted the Clarke award which has been forwarded to Clarke through the usual diplomatic channels.

**This final note.** The October (01) edition of **CSD**, our very special Fifth Birthday issue, will run about **five days later than October 01st**. We know that members of the industry are eagerly awaiting the full story of TVRO in anniversary issue form and want to give you advance notice that because of the size of the special issue, it will be slightly behind the normal (and timely) 1st of month release date!



**OFFSET FED 6 footer from M/A-COM** led to speculation about the next generation of antennas for home TVRO. Does offset-feeding make a surface plus feed system which is more efficient? Does it **REALLY** help with close-spaced birds? The studies go on; the facts are still not all in.





# TVRO

## DEALERS/ DISTRIBUTORS:

**PUT SOME 'SIZZLE'** into your fall sales campaign by offering your customers a very special publication that tells the total and complete 'TVRO Story.' CSD for October 01 celebrates our industry's 'Fifth Anniversary' in a distinctive and exciting 'upbeat' manner that makes you proud to be a part of the world's fastest growing consumer electronics industry! Our October 01 issue breaks all tradition by involving every element in our diverse industry into a single authoritative reference manual. From the first \$20,000 S/A terminals sold to private homes in the spring of 1979 to the 'Joe Six-Pack' \$795 'install-it-yourself' terminal packages of 1984, CSD for October 01 tells the complete story of TVRO to date.

**CLEARLY A SPECIAL ISSUE** / front cover identifies this special 'Re-Sale' issue of CSD as one designed to acquaint consumers with the wonders of TVRO and the amazing growth story of TVRO in North America, and, the world. Even if you do not wish to offer this special issue for re-sale in your TVRO store, **you will want extra copies** for your banker, your 'special customers' and your own staff!

**SPECIAL ISSUE PRICING** / established retail price of \$15 for this issue alone creates 'premium value' for you if you elect to use this issue as a 'bonus' for sales promotions in your dealership. Of course **your own pricing**, as a TVRO dealer, is **lower** and allows you to turn this issue into a mini-profit-center (see order form below).

### BONUS



POINT OF SALE

DISPLAY

#### CSD/OCTOBER 1984 DEALER PROGRAM:

- **SEND US 11** copies of special CSD — October 1984 issue at \$9.00 each (\$99 total, shipping included); payment enclosed (USA only).
  - **SEND US 25** copies of special CSD — October 1984 issue at \$8.00 each (\$200 total, shipping included); payment enclosed (USA only).
  - **SEND US 50** copies of special CSD — October 1984 issue at \$7.00 each (\$350 total, shipping included); payment enclosed (USA only).
- NOTE:** Orders for 25 or more copies will ALSO RECEIVE special point-of-sale display poster for in-store promotion.

**Ship To** (give **UPS** shipping instructions):

Name \_\_\_\_\_

COMPANY \_\_\_\_\_

Address (**UPS**/street address) \_\_\_\_\_

Town/City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Send order with full payment to:

**CSD Magazine**  
P.O. Box 100858  
Fort Lauderdale, FL 33310

**Questions?** Call Carol Graba 305/771-0505 weekdays 9 AM to 4 PM eastern.





# The BR Futureproof™ Warranty. It Protects Something More Valuable Than Equipment: Your Reputation.

Word of mouth advertising from customers can make you or break you. So make sure you get compliments—not complaints—with BR's exclusive "Futureproof"™ five-year warranty. It's the first opportunity for TVRO customers to buy an extended protection plan for their systems at the time of purchase, just like they buy for their cars.

As a BR Satellite Communication dealer, you can offer "Futureproof"™ coverage for a minimal cost to your customers (and a profit for you).

Backed by one of the world's largest insurance companies, BR Satellite will guarantee all electronic components against any manufacturer defects for a total of five years (Including the first year which we cover automatically). Contact us to discuss all the details—then "Futureproof"™ your reputation.

## Immediate Free Replacement Service.

*BR Satellite is the only distributor in this industry who will replace any defective TVRO product with a new unit, just by making one toll-free phone call. Before you send the defective unit back and at no cost to you.*

## The "Futureproof"™ Decal—a Sign of Success.

If you've got it, flaunt it! The "Futureproof" warranty sticker in your store window could be your best salesman. We'll send brochures and in-store displays, too.



## Our Standard Warranty—Still the Ultimate, Still Free.

Every piece of equipment we sell is backed by our unconditional replacement policy for a full year.\*

It's an irresistible sales tool, and it won't cost you or your customers a cent.

We'll ship a replacement via UPS Blue Label, at our expense, the same day you call us. We ask only that you ship the defective unit, at your expense, within 5 days *after* you receive the replacement.

At BR Satellite, there is no "turnaround" waiting time. And only a bare minimum of your valued customer's down time.

## We Distribute More Than Equipment: Free Ads, Brochures and More!

Our total dealer support program can provide you with ad art, ready for you to run and brochures to educate customers.

## Famous Names. For Dealers Only.

MTI	Arunta
ECI Antennas	Sat-Tec
NORSAT LNAs	Seavey Engineering
Chaparral	Newton Test Generators
Earth Terminals	Satellite Ground Components
Wilson Microwave Systems	ERI LNA Jumper Cables
USS Maspro	Earth Station Accessories
Dexcel	Coax-Seal

## Toll-free ordering. Same Day Shipment.

Every product we distribute is in stock at all times. If you call our toll-free number before 2 PM, we'll ship your order the same day. And unlike some distributors, we're happy to ship C.O.D.

\*All products and items discontinued during warranty period not subject to immediate replacement.

# "We Distribute Trust."

**1-800-421-0148**

(NEW YORK ONLY) **1-800-832-6660**

Call Toll Free 9:30-5:30 E.S.T. Mon.-Fri.





**BR SATELLITE** is the only distributor in this industry who will replace any defective TVRO product with a new unit. We'll ship a replacement via UPS Blue Label, at our expense, the same day you call us.

## With Norsat's LNA, Your Customers Will See Less Noise. With Our 1 Year Warranty, You'll Hear No Noise From Them.

Introducing the quiet one—the remarkable Norsat LNA! Norsat has combined years of experience with traditional Japanese manufacturing excellence to produce a low noise amplifier of exceptional quality.

Quiet quality, for better pictures even on today's smaller dishes. Degree for degree, dollar for dollar, the Norsat is simply the quietest, most efficient LNA ever made.

*Unique all GaAsFet four stage design (no bi-polars) with min. 51 db gain.*

*Total weatherproofing—precision milled recessed top cover; computer-milled aluminum body.*

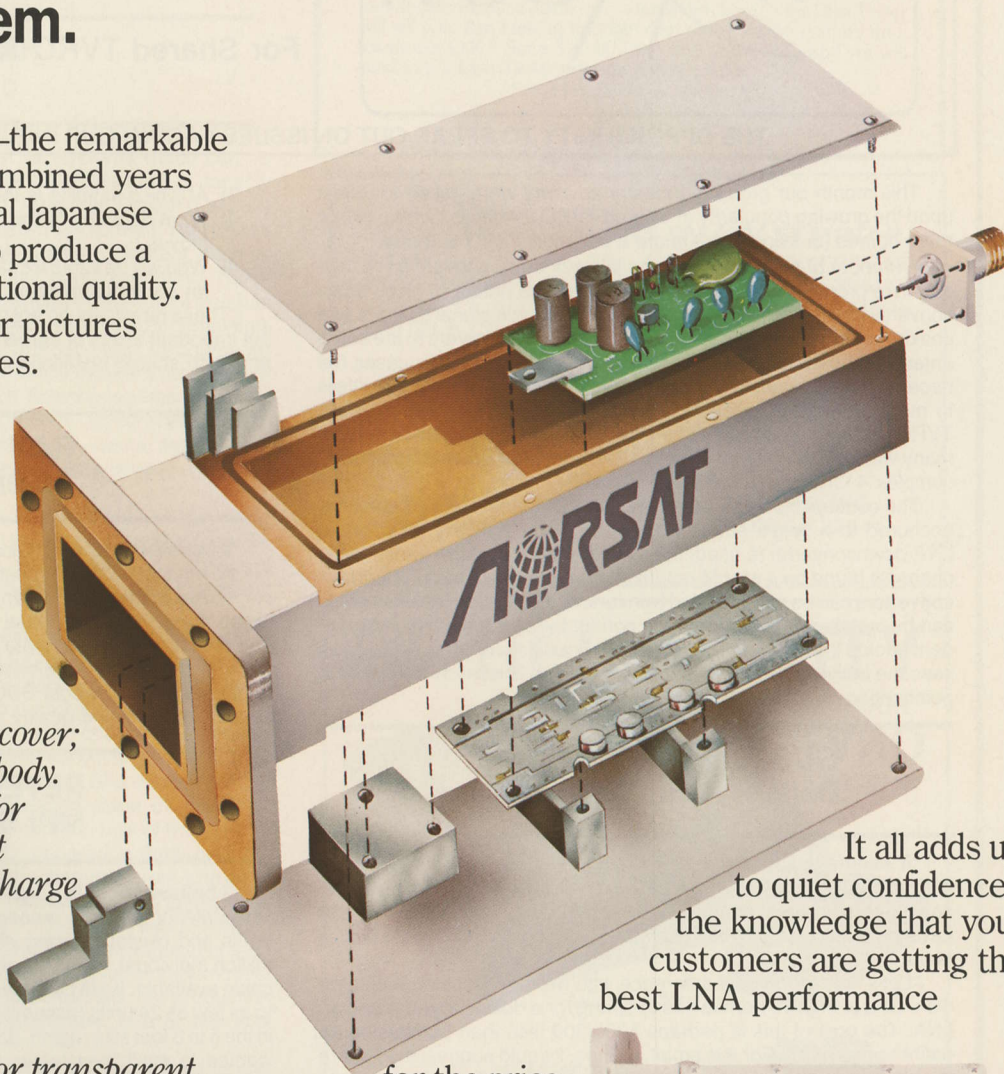
*Grounded input probe for maximum protection against failures due to lightning discharge or high ambient RF fields.*

*Triple sealed and ruggedly mounted type "N" output connector.*

*Low VSWR resonator for transparent impedance match into the first GaAsFet stage.*

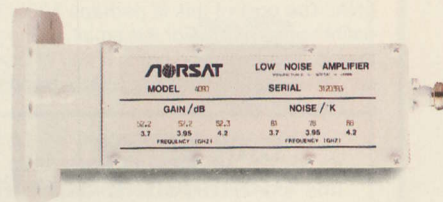
*Separate power supply board featuring ultra-stable regulation with built-in protection against polarity reversal, voltage fluctuation, and static discharge.*

*Available in 100°, 90°, 85°, 80°, and 75° noise temperatures.*



It all adds up to quiet confidence—the knowledge that your customers are getting the best LNA performance

for the price. BR Satellite is proud to be the only distributor in the Eastern United States for Norsat LNAs, and one of only three distributors nationwide. Quantity Prices Available.



### "We Distribute Trust."

Dealers Only.

**NORSAT**



# DISH IT OUT!

## ON THE TABLE: 'Is There A Market For Shared TVRO Antenna Systems'?

THE OPPORTUNITY TO SPEAK OUT ON ISSUES FACING OUR INDUSTRY TODAY.

This month our group of industry advisors were asked to reflect upon the growing popularity of 'shared TVRO terminals'; where two or more homes (or living units) share a common TVRO antenna.

A number of the recent designs in block down conversion receivers have promoted **the concept** that given the nature of block down conversion, it is possible to use MATV/CATV type signal splitters and coaxial cable to interconnect two or more TVRO receivers to the same antenna. The technology is semi-mature, lacking in some cases the necessary 'IF line amplifiers' and proper frequency-range line splitters to make a 'neat' installation. Individual homes, using two or more TVRO receivers connected to the same antenna, are hardly new; many were installed even back in 1979 and 1980 using isolators and complex 4 GHz signal splitting techniques.

The concept currently being presented suggests a fixed antenna, anchored to a single satellite (i.e. F3R or G1 typically). If a single LNA/downconverter is used, the system offers all of the transponder channels found on a **single** polarization. Alternately, twin LNA/downconverters can be installed and twin runs of distribution (coaxial) cable can be installed to give all homes connected to the system independent choice from either vertical or horizontal transponder sets. In this case the individual home-outlets have an 'A' / 'B' **switch** to select the polarization of choice.

### GUS 'Sandy' WIRTH, JR. Delta Satellite Corporation

"It seems to me that the only reason two or more homes would wish to share a dish would be cost savings. If two neighbors wish to save money, I would suggest that they share their lawn mower first! Lawn mowers are used less often than satellite dishes and the cost is about the same.

"Let's look at the cost difference with two homes using the same dish. One of the two homes has to spring for a downconverter and an LNA. The cost of this is perhaps \$200/300 less than purchasing an entire second dish. For this small savings, I would suggest they share their lawn mower and put in a pair of dishes. In that way both homes can have the full flexibility of totally independent dish systems."

### DAN BERGE Continental Satellite Systems

"We feel there is a market for the sharing of a single TVRO antenna by two or more residences. However, our distributors report there are serious questions which must be dealt with before two parties take such a step. For example:

- 1) Is it possible to get a right-of-way for the cable running across boundary lines?
- 2) On whose property will the antenna be placed, and who will pay for any increased property taxes resulting from the improvements to the land?

- 3) At which satellite is the dish going to point?
- 4) What happens to the agreement if one of the sharing parties moves?
- 5) Who will be liable for structural damage by or to the antenna, or for personal injury by the antenna?

"These questions do not prohibit such an installation, but do point out important areas of agreement which should be resolved **prior** to any such shared installation."

### RAY WILLHOITE Antennas Unlimited

"**Absolutely no way!** Most people do not stay on 'one satellite.' We do have a number of customers who have two or more receivers connected to the same antenna but for an installation of this type we install a pair of LNAs, dual conversion receivers (such as Earth Terminals) and run separate lines for each of the two polarizations. This has proved to be the best, most reliable technique we have found to date and the low cost BDC equipment simply will not 'cut it' with people who demand quality reception."

### PETER C. SUTRO MPI Satellite, Inc.

"I believe there is potentially a very large business in Micro and Mini-SMATV systems among garden apartment complexes, trailer parks and cluster housing developments which could total several million individual TVRO receiver systems in areas where there is no cable available. It will be economically feasible to dedicate a headend to as few as 24 units (assuming 50% sign-up factor) using an antenna in the 5 to 6 foot size region, dedicated to Galaxy One. The people who wanted to avail themselves to the offered service could do so by purchasing or leasing a block downconversion receiver, and have the availability of 24 transponders.

"There are, however, special problems with implementing such a program at this time:

- 1) The uncertainty of HBO and other programmer plans regarding encryption, and once the signals are encrypted, how they will deal with (mini) SMATV operators. It would be very embarrassing, to say the least, to have to tell your customers that their viewing was NOW LIMITED to say four channels (such as C-SPAN, WOR, CBN and SIN) while the other channels (such as Disney, HBO, Cinemax, The Movie Channel, Showtime, WTBS, CNN, Nashville et al) are now encrypted and NOT available.
- 2) In my opinion, the existing hardware offered by the OEMs has not been 'optimized' for this application yet. I have yet to find an antenna and mount which is truly designed for garden apartment installation. I have yet to find a block downconversion



receiver offered which combines low price AND stable reception so that the average consumer can simply tune in a program with the same ease of regular television reception. More importantly, I know of no receivers in the block downconversion PLUS low cost region which have addressed the 'unclamped/unfiltered video' requirement of HBO's LinkAbit encryption system.

"Assuming that solutions to these two problem areas are found (and I predict that will happen within the next six months), I believe the potential is enormous in Mini-SMATV."

## BILL MILLER Promar, Inc.

"Yes, I feel there is a 'real' market for systems which can be shared. Here in Florida, in part because of the proliferation of densely populated single-family residences (the 'American Dream') we are seeing a large demand for all types of 'shared' equipment. There have been many sold and those that have high quality equipment, such as the DX series receivers, are happy and still 'good neighbors.' Those that have been installed using the lower-priced equipment which has been available to date are less than satisfied with the usual complaints that the picture is 'sparkly' or 'full of lines' or it 'zig-zags.' Of course we know the problems are related to interference between receivers or dirty outputs from poorly designed block downconverters or simply inadequate BDC receiver designs to begin with. Some of these problems would go away with higher gain antenna systems; some would get worse with higher gain antenna systems. Regardless of the options, the results are unsatisfactory.

"My first demand must be for better equipment. I believe the technology is available and now we need to get 'the good stuff' down in price to where it will pay neighbors to give-up their free choice of satellites for the sake of a lower price for the equipment and having the dish 'in the other guy's yard.'

"My second demand would be for easier operation. I know this sounds ridiculous, but everyone should try (at least once!) using the equipment they are selling. The AFC approach to make a potentiometer without detents work like a click-stop switch is a little rough for Granny to tune. She wants channel 15 to be on channel 15, whether she tunes it before or after she turns the receiver on, and regardless of whether she tunes from right to left or left to right! She doesn't want to miss the channel. Of course I am referencing some of the (very) inexpensive units, which happens to be where the bulk of the marketplace is or will be. Synthesized 2nd L.O. generation (tuning) is the technique of the future and I believe that the manufacturers who have been successful with low-price receivers should address themselves to that. (Are you listening, John Ramsey? You build it and PROMAR will sell it!) What better application for a single board synthesizer than as the 2nd L.O. for a block downconversion receiver of very modest cost. Imagine: no setting of the high and low channels; low production costs; interchangeability of downconverters, and, one or two less wires to run when installing!

"My third demand would be versatility. Why limit yourself to one method of connection of a receiver system when it is much better to only stock one or two different types and sell the heck out of them for ALL uses.

"Simplicity is great. I like Anderson's use of the UHF frequency band so that UHF cable hardware works. I think a loop-thru for the IF output would also be a good idea so that the multi-receiver hookup is simpler for the installer with less chance to foul-up. Remember, please, that a high VSWR is no joke at UHF frequencies when you have relatively low signal levels and are trying to deliver a decent quality picture to each receiver location. This is particularly true for block downconversion equipment.

"And, how about a block downconversion receiver with a cable-grade modulator built in with loop-thru and filters for the up-scale installation? (\*)

"Or, how about one weatherPROOF 'black box' with a 4 GHz input, power and output jack for any four or five satellite channels of

## THE DISH TESTER

Dish surface accuracy is probably *The* most important part of a good picture. Ever wish you could check it? Now you can, with a tool small enough to fit your tool box — The Dish Tester. It will answer questions like: Do I have to replace that dish, or can I pull it true? Are my sparklies caused by the electronics or a bad dish — factories get tired of returned electronics that work good. Was the metal dish bent in shipping — the Dish Tester will tell you. Did you assemble the dish correctly? Has the base warped the dish? Why sparklies in every other dish, they're all the same? Is it TI causing sparklies, or a bad dish? Where do I put the clips or extra braces to make that mesh dish more efficient? It didn't have sparklies before the windstorm, but it does now — is the dish bent — the Dish Tester will tell you. Am I taking the right dish to the show? Are my mfg. tolerances O.K.? Send \$20.00 (any way you want), and we will send you a Dish Tester postage and tax paid.

Send to: STV Co., Dept. A  
516 W. 33rd  
Hays, Ks. 67601

## SATELLITE DEALERS SMATV SEMINAR

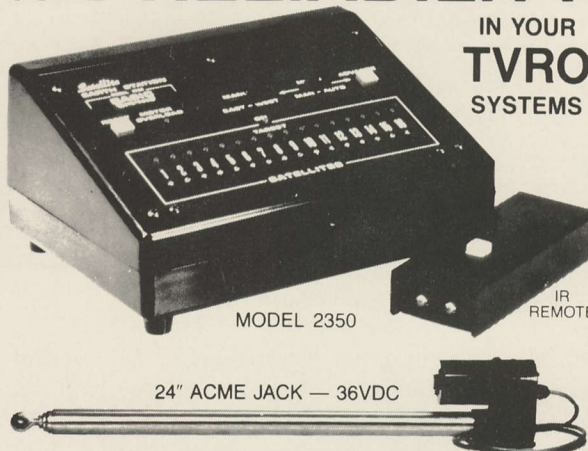
TRAINING IN SALES, QUOTES, CONTRACTS,  
DESIGN, INSTALLATION --- ALL AREAS OF SMATV  
BUSINESS, FIELD TRIPS TO SMATV SYSTEMS IN  
MOTELS, CONDOMINIUMS AND COMMUNITIES ----

NOVEMBER 10, 11, 12  
SEASCAPE RESORT • DESTIN, FLORIDA  
\$550 - COST INCLUDES MANUAL  
ATTENDANCE LIMITED • ENROLL NOW

(904) 837-8007  
SOUTHEASTERN SATELLITE SYSTEMS, INC.  
P.O. DRAWER 6250 DESTIN, FLORIDA 32541

## PUT SOME RELIABILITY

IN YOUR  
TVRO  
SYSTEMS



Our Model 2350 features 16 programmable satellite locations plus manual override and is easily programmed from the front panel. Dual adjustable end limits, motor stall protection, on-off switch, optional infrared remote control, 125 ft. cable, and the quietest, smooth running 24" jack in the industry make this the best actuator system available today.

**BASIC**  
SYSTEMS

—CALL TOLL FREE—  
**800-251-0014**

TULSA, OKLAHOMA



one polarity, on any four or five VHF channels. This box should sit at the bottom of the dish and all Granny has to do is switch her TV tuner in the exact same fashion she now does for off-air reception.

"There are a multitude of possibilities here, all waiting for some E.E. (**Entrepreneurial Engineer**) to implement. The point of this is that this equipment could be made, and it could be sold. And it is not being made so it is not being sold.

"If we are to continue our growth and our rapidly escalating sales levels, we need to get into new markets. We don't do this at the hardware level by adding one more memory position to a drive and controller and calling it 'new.' We open up new markets by making equipment which will make sales possible to people who would not

have bought before; to actually increase the number of people who are watching satellite television.

"These suggestions represent a hardware approach to the same problem that Coop is approaching in **CSD** currently; SMATV System Design, or taking the 'mystery' out of Mini-SMATV and making it practical for the small dealer and affordable for the user."

(\* — Electrohome has recently introduced a receiver that comes close to Miller's hypothetical up-scale receiver; their SRM-36 includes full 24 channel satellite reception with a built in high-output synthesized CATV grade modulator offering switchable operation on any VHF, mid or super band channel within its range.)



FEED  
BACK

THIS MONTH: HBO Is 'Not Generic'

Readers with additional comments or views are invited to submit them to '**CSD/2 Feedback**,' P.O. Box 100858, Ft. Lauderdale, FL 33310. Readers who wish to receive the initial questions each month to participate in the 'Dish It Out' program should contact Carol Graba at the above **CSD** address or telephone 305/771-0505.

In our August 15th edition of **CSD/2**, our Dish It Out segment dealt with the hypothetical question of 'what might happen to our market if HBO decided NOT to offer an encrypted multiple-channel service to home TVRO viewers?'. Our opinions were diverse. **Gus Wirth, Jr.**, Chairman of Delta Satellite Corporation has the following follow-up views to offer on this question.

"My first reaction (to HBO not offering a home-user descrambler program) is 'So What!'. There are at least nine other so-called movie systems on satellite. Our problem is that we make the mistake of using the name 'HBO' as if it was the ONLY movie channel available. This attitude must be changed, so the end user (i.e. OUR customers) is not confused. **HBO is not generic** for pay or premium television. If HBO is

'lost' to home viewers, we need an educated public that understands that HBO is only a small part of the premium movie pie.

"I personally live by some simple rules: 'If you build the best mouse trap, you catch the most mice and sell the most traps.' If HBO ran by this belief, they would have the best product available and competition (the other premium channels) would not have evolved. They evidently do NOT have the 'best product' as certainly other premium service channels have evolved. Let's face facts: HBO is NOT the only source of such programming.

"The present number of home TVRO systems and our present rate of growth WILL, certainly, attract programmers; as it appears to have attracted HBO. I can envision two types of programming available; one set of transponders will carry advertiser supported programming. I feel it is far simpler to collect money from a handful of advertisers than it will ever be to collect from several million TVRO viewing homes.

"The second 'system' will transmit with encoded signals and eventually this system will have the ability to decode individual TVRO receiving systems by remote control or addressability. This will certainly give the impetus for the viewer to pay for the service, assuming the service is truly worth paying for.

"We live in a 'free enterprise' system. I assure you that given our system, if a demand exists, **someone will fill that demand** and figure out a way to collect for the service. I feel the best way to handle decoding and encoding will be on an individual basis with a competitive situation to keep the pricing in line with reality. The first thing we need to do to accomplish this is to get the legislation now in front of Congress passed. Every effort should be made to have as many people as possible contact their Senators and Congressmen. The technology will be available to turn off and on a TVRO receiver by remote control. We want to be sure we are in a proper legal position to handle this system when it is finally implemented."

Readers with differing views are, as always, invited to submit their views for consideration here. Address comments to '**CSD/2 Feedback**,' P.O. Box 100858, Ft. Lauderdale, FL 33310.

#### MID-MONTH COMMENTS/ continued from page 3

F3R. That means better pictures with medium and larger sized dishes or acceptable pictures with the smaller dishes (down to 4 feet in diameter). It can be argued with some success that a system built around a four foot dish anchored on a single satellite is not TVRO; it is '**DBS**' at C band. But long after these arguments have subsided there will be plenty of these smaller dish systems all over North America tuning in the 20 to 24 channel service from Galaxy. And each one will have **somebody's** LNA and **somebody's** 4 GHz receiver connected to their four or five (or six) foot 'pie-plates.' I seriously doubt any one manufacturing LNAs or receivers really **cares** what **size dish** the equipment ends up attached to!

Many in Nashville seemed to be missing this vital

point; with Galaxy now very 'competitive' in programming (and perhaps ahead of F3R in appeal), and with its stronger footprints, **the fine line separating 'TVRO' from 'DBS' has all but disappeared.** As a dealer you may be incensed, and angry, when somebody tries to talk you out of your ten foot dish system in favor of a low-cost 5 footer. Make it easy on yourself; **sell both products.** Sell 'TVRO' for people who want REAL satellite reception and sell 'CBD-DBS' to people who will be happy with a fixed mount and 20 to 24 channels of service. If you don't do this, somebody down the street will and ultimately this will hurt your own business growth. Let's keep 'CBD-DBS' in **our** family and not allow it to branch out into an industry unto itself. It's here and we can't change that. **Now let's figure out how we make money selling it!**



# AIMERS<sup>↑</sup>

BY DRACO

# RIGHT ON



## ACTUATOR GIMBAL BRACKET

Eliminates side and up and down pull on the Actuator. Prevents premature failure of the power drive unit.

## AIMER III

The complete answer to satellite dish movement and polarotor control. Up to 64 satellite locations with microprocessor accuracy of position and polarotor. Easy to use — simply turn the knob until the satellite reads out and push "GO TO." The Aimer III does the rest. Built-in power supply — low profile — superb styling.



## AIMER II

Precise antenna movement with push button ease. Built-in power supply, dynamic breaking. A solid solution to low cost dish power positioners.

## POWER ACTUATOR

Designed and built for satellite dish movement. Sealed tubes, solid lubrication, gimbal rod end, Timken roller bearings, anti-jamming. Rated at over 2000 lbs. The Draco Power Actuator operates at 12 to 36 volts with self-resetting current protection. Infrared light eruptors are impervious to all electrical interference. Positively the best Actuator built.

**FOR MORE  
INFORMATION CONTACT:**

**DRACO LABORATORIES, INC.**  
1005 Washington Street  
Grafton, Wisconsin 53024 U.S.A.  
Phone: 414-377-0770  
Telex: 26886



**DISTRIBUTORS:** **WISCONSIN:** Delta Satellite Corporation, Cedarburg, WI 414-375-1000, Nat'l 800-558-5582, Wisc. 800-242-2290. **NEW YORK:** Satellite Video Services, Palenville, NY 518-678-9306. **OREGON:** Von's Total Television Center, Eugene, OR 503-342-1618. **OHIO:** Satco U.S.A., New Philadelphia, OH, Nat'l 800-362-8619, Ohio 800-362-6781. **FLORIDA:** United Communications Supply, Tampa, FL 813-971-1648. **UTAH:** Video Link, Salt Lake City, UT 801-278-2878. **TENNESSEE:** Cox Enterprises, Rockwood, TN 615-354-3471. **CANADA:** Ground Control, Concorde, Ontario 416-669-6366. **Satellite Systems Ltd.,** Burnaby, B.C. 604-430-4040. **Videosat Canada LTEE,** Charney, Quebec 418-832-4621. **TEXAS:** Morgan Satellite Systems, Hughes Spring, TX 214-639-7517.



# Paraclipse

HIGH PERFORMANCE  
SATELLITE TELEVISION SYSTEM



The Paraclipse 4.8 meter  
(16 ft.) antenna.

PIONEER MEMBER OF  
**SPACE**

## Survival of the Fittest

It's a tough world out there. Every minute of every day the effects of wind, rain, heat, cold and corrosion will do their best to defeat your investment.

If your system is to survive and perform accurately day after day, year after year, you will need to start out with equipment strong enough to endure nature's worst.

The famous Paraclipse design rib and ring truss system is simply unequalled in terms of rigidity, strength and parabolic symmetry.

The antenna framework is a precision welded aluminum alloy structure covered with heavy expanded aluminum mesh. The result is a strong, lightweight, dimensionally stable mesh reflector that is capable of supporting the kinds of loading that a solid dish would impose.

The hub assembly, polar drive,

pedestal mount and counterweight are all fabricated from steel. Precision tooling and manufacturing techniques enable the 4.8 meter Paraclipse to track from horizon to horizon and from zero to 90° elevation with perfect, dead center accuracy.

Our counterweight assembly offsets the forward weight bias imposed on the polar tracking mechanism. By placing a mass equal to that of the reflector behind the polar T, we've greatly reduced the demands placed on every component of the drive system. With the drive disconnected, the entire superstructure swings smoothly to the center position and can easily be moved by hand to any position in the arc.

Every part is powdercoated with a beautiful baked-on epoxy finish that effectively seals the antenna from the elements. The entire assembly is put

together with stainless steel bolts, nuts and fasteners.

We're so confident in the way we build the 4.8 meter Paraclipse that we guarantee it for three full years against wind damage. That's right, a three year unlimited wind speed warranty. If it is damaged by wind in the first three years, we fix it. You are protected right up to, but not including an officially declared disaster.\* We are that confident.

You will want your investment to last. You will want your equipment to perform. You will want accuracy and reliability for a long, long time. And you will want all of these things at a reasonable price from a manufacturer who will stand squarely behind his products.

At Paraclipse we think you deserve no less.

**Paraclipse Inc. 3711 Meadowview Drive, Redding, California 96002 (916) 365-9131 244-9300**

\* Full warranty information available upon request.

Mark Fator photographer

© Copyright 1984 Paraclipse Inc.